

Moody Street Feeder: Gatehouse  
Lowell, Massachusetts  
Middlesex County

HAER No. MA-9A

HAER  
MASS.  
9-2076  
16A-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD

MOODY STREET FEEDER: GATEHOUSE

HAER MA-9A

HAER  
MASS,  
9-LOW,  
16A--

DATE: 1848

LOCATION: At the junction of the Moody Street Feeder and the Merrimack Canal,  
Lowell, Massachusetts

DESIGNED BY: Unknown

OWNER: Proprietors of Locks and Canals,  
Lowell, Massachusetts

SIGNIFICANCE: The Moody Street Feeder Gatehouse contains manually controlled equipment for operating the sluice gates which were used to control the flow of water through the Moody Street Feeder. Researchers are referred to MA-1, Lowell Canal System for additional information.

TRANSMITTED BY: Monica E. Hawley, Historian, 1983

Merrimack Gatehouse - Lowell, Mass.

The Merrimack Gatehouse and the Moody Street Feeder which it served were built in 1848. The gatehouse functioned as a housing for the three gate mechanisms of the feeder and protection for the gatekeepers from the sometimes harsh climate of Lowell.

The Moody Street Feeder was built as part of general improvements to the Lowell Canal system. The feeder connected the Western and Merrimack Canals. When the three gates of the feeder were opened, water flowed from the Western to the Merrimack Canal, increasing the supply of the Merrimack Mills. The feeder also regulated the flow to the Boott Mills.

The Merrimack gatehouse is a twenty-two by sixty-two foot one story brick structure. It has load bearing walls and a wood frame roof structure covered with slate. The brick is laid in flemish bond and has eighth-inch mortar joints. The cornice is detailed with dentil-like brickwork. The sixteen six over four light arched windows have wood frames and sash. Those exposed to the street levels are covered with a metal quarter inch screening. Foundations are made of cut granite, as is the platform inside the structure at the west door. The floor level of the gatehouse is 3'5½" below the level of the platform. There are three wooden stairs down from the granite platform running parallel to the west wall leading to a 10'-8" wooden platform. A stair down to the east of this lower wooden platform drops to the floor level. At the end of the 10'-8" platform are four wooden stairs leading up to an enclosed office. In the north-west corner of the gatehouse are two restrooms, one reached by stairs running parallel to the west wall, and one accessible from the north-east platform. This wooden platform is three steps up from the floor level and extends from the diagonal northernmost gate to the east and north walls. The second restroom is up four steps from this platform.

A fourth platform with stairs was built at the south-east end of the building to accommodate the new door at the south end of the gatehouse. Extending along the east wall, the access leads down three steps to a 10'-7" platform, then down two sets of two steps, one to the west and one to the north. These two sets of steps allow access to both sides of the center gate.

The three gates are angled at nearly forty-five degrees to the walls of the gatehouse. The feeder below takes this angle to allow the water to flow with less friction and turbulence into the Merrimack Canal. The framework of the gates is tied into the rafters of the gatehouse. The gates and their mechanisms are all original fabric and are in functioning condition.

The structure itself is in excellent condition. There are, however, a few minor repairs and changes which should occur.

The north wall at the chimney level on the exterior has lost some mortar and an area approximately five feet square should be repointed. The batt insulation on the roof is falling down and should be re-attached. There are fifteen broken, cracked or missing panes of glass in the structure which need replacing. Other than these minor repairs, the gatehouse is sound.

There are no original drawings for the gatehouse in existence today. It is possible there were no official construction drawings for the building, as it is a fairly simple design and duplicates many features of other gatehouses, particularly the Pawtucket Gatehouse at the entrance to the Northern Canal. The Merrimack Gatehouse, at first inspection, seems to be symmetrical with seven apertures on its east and west facades and two on its north and south. However, the spacing of these apertures and the actual fenestration dimensions are irregular and asymmetrical. The distances between windows vary up to three and three-eighths inches. The masonry openings for the windows vary approximately one-eighth to one-quarter of an inch. Nonetheless, some features of the gatehouse are symmetrical. There are two identical corbelled chimneys on either end of the structure. All window sash, frames, lights are the same (given allowances for the various masonry opening sizes). The door on the west facade, the original entrance to the building, is located exactly in the center of that facade. The three gates for the feeder are centered within the structure. The symmetrical yet asymmetrical features of the gatehouse could be evidence of a lack of construction drawings.

Changes to the building itself over the years have been few. The only real alteration to the exterior has been the removal of the south east window in exchange for a door. This change occurred in 1973 while the gatehouse was a flower shop (see below). The original arch of the window remains in place above the door. Interior changes involved mainly the addition of the wooden platforms and restrooms described above. Although not yet substantiated, the southwest enclosed office is possibly original.

The Merrimack Gatehouse has functioned in its original capacity for most of its existence. December 1, 1972, a lease was signed renting the property to the "Dandylion" flower shop for a period of two years. This was when the wooden platforms were constructed and the south door to Merrimack Street was installed. The tenants did not complete their two year occupancy. The structure was again put to use in 1976 as the headquarters/visitors' center for Lowell's Bicentennial and Sesquicentennial Commission. This commission was dissolved in December of 1976 and the gatehouse was no longer used in this capacity. The city of Lowell tourism center was established in the gatehouse early in 1978 and remained until May, 1979 when the National Park Service personnel replaced city personnel.

The Park Service is acquiring the building in the near future. Presently the building is owned from the foundations up by the Proprietors of Locks and Canals. However, the property under the gatehouse was originally owned by the Merrimack Manufacturing Company, who sold it to the Wamsuck Company. The Proprietors of Locks and Canals maintains full access rights to the building.